



SIGNON

Sign Language Translation Mobile Application and Open Communications Framework

**Deliverable 6.2: First Annual Report on Communication and Dissemination
Activities**

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Acronyms

The following table provides definitions for acronyms and terms relevant to this document.

Acronym	Definition
SOTA	State of the Art
DHH	Deaf and Hard of Hearing
WP	Work Package

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1. Introduction

In the SignON project, the "nothing about us without us" principle is strongly observed. Using the co-creation strategy we closely collaborate with European Deaf and Hard of Hearing (DHH) communities to co-design and co-develop the SignON service and application while continually assessing the quality and validating the acceptance of both. Because of this, "Communication, Dissemination and Exploitation" (WP6) is a very important part of the SignON project. In deliverable D6.1 "SignON Communication and Dissemination Plan" the 'PDCA' principle (Plan, Do, Check and Adjust) and a seven-step method of continuous improvement in the communication approach, were used for a publicity-oriented approach in which informing, giving insight, motivating and 'selling our idea' are key. Our communication and dissemination plan deals with the following questions:

1. What is the current situation and why do we want to communicate?
2. Who are the target groups in our communication?
3. Which communication strategies and tools do we use?
4. What are our communication objectives?
5. When will we communicate?
6. What is our budget for communication?
7. How effective is our communication?

These questions were extensively addressed in Deliverable 6.1 by Vlaams Gebarentaalcentrum (VGTC), who was responsible for creating D6.1 and is continually implementing and updating the communication and dissemination plan (WP6). In addition to the three VGTC staff members (who mainly take care of coordination, financial control and linguistic perspectives in SignON and WP6), a new communications manager was appointed as of February 1st 2021 (part-time, 60%), who is responsible for operational objectives. Later, with the expansion of our communication activities (see below), an additional part-time staff member (50%) was hired from October 5th 2021. DCU reviews all communication and dissemination activities in fortnightly meetings with VGTC's communications manager.

2. Project Context

The SignON project aims to develop a mobile application that will translate between different European signed and spoken languages. The application, running on a standard mobile device, will interact with a cloud-based distributed framework dedicated to the computationally heavy tasks. The application and the framework will be designed through a co-creation approach where deaf, hard-of-hearing and hearing users will work together with SignON researchers and engineers to build a solution that suits all user types. Furthermore, it will be built for easy adaptability to other languages (signed and spoken) and modalities. Ultimately, the application will promote the equitable exchange of information between all European citizens.

The translation process involves three major steps which needs to be clearly communicated with the various research, industry and user communities:

- Recognition of the input message: spoken messages will be transmitted as an audio stream, signed messages will be transmitted as a video stream and text messages simply as text. The audio and/or video will be processed accordingly for a suitable intermediate representation to be recognised.
- Translation from one language into another via an intermediate representation: symbolic and embedding based representations will be developed to facilitate the translation of (recognised) messages from one language (signed or spoken) to another.
- Output message synthesis: based on the output from the previous step, an output message will be generated in the necessary modality - audio via text to speech; signed message via a 3D avatar and text simply as text.

In the SWOT summary of D6.1 Communication and Dissemination Plan, the strengths, weaknesses, opportunities and threats for the SignON project were listed. This analysis serves as a starting point for drawing up a communication strategy and objectives. However, this SWOT analysis was based on earlier findings by VGTC from previous projects similar to SignON. It is therefore not an in-depth exploration study and relied on initial findings from Task 1.1 (“Case Studies and Evidence Analysis”). Nevertheless, experiences in the first project year and results from Deliverable D1.3 “First User Requirements Report” indicated that the initial findings from the SWOT analysis remain unchanged.

While the opportunities for the SignON application as a support tool for communication between deaf signers, hearing people and non-signers are promising, some form of resistance from the deaf communities (in this case the deaf signers who form a community on a national level, with sign language as their primary language) still remains. On social media, the hashtag #notoavatars was introduced on September 9th 2021 as a response to the growing interest in research into and use of sign language avatars. Although not widely circulated, this has become a focus of attention in social media. This can only confirm that one of the main challenges in communicating our project is in regard to automatic translation between spoken and signed languages, and the use of sign language avatars.

Also, within the framework of the co-creation strategy of the SignON project, one of our internal strengths is the cooperation between deaf and hearing experts and researchers. This has worked well in the past year, resulting in a stronger understanding and cooperation between consortium members. However, issues still remain that will need to be resolved with internal consensus, such as the use of different kinds of sign language videos (performed by L1 or L2 signers) as training material for machine learning or the use of the SignON service for making content in public media broadcasts accessible.

3. Target Groups

The target groups of the project are not homogeneous, yet different target groups can be clustered based on more or less the same characteristics. The communication plan includes communications tailored to these different target groups. The table below lists various target groups to whom the SignON communication is addressed.

Target group	Importance of the target group	What messages should we convey?
EXTERNAL		
DEAF SIGNERS, mostly members of European deaf communities, who identify as a linguistic and cultural minority group and who use a sign language as their primary or preferred way of communicating.	Primary	The overall aim of this project is, to provide an application that will facilitate communication and remove existing barriers - the SignON App - which will initially provide limited services (will not work perfectly in all use-cases and scenarios) but will
ORGANISATIONS AND REPRESENTATIVES FOR DEAF PEOPLE	Primary	

AND SIGN LANGUAGES, includes professionals and experts.		eventually grow to become a bridge between signers and non-signers.*
DEAF AND HARD OF HEARING PEOPLE WHO ARE NON-SIGNERS ¹ , and do not necessarily identify themselves as members of a deaf community. They use a verbal language as their primary and preferred way of communicating.	Primary	The SignON application is flexible, scalable and adaptable (including personalisable) and provides multilingual translation via different input and output modes; it is not only a ‘sign language app’.
HEARING PEOPLE with a connection to deaf and hard-of-hearing people and sign language(s). Involves hearing family, colleagues or relatives of deaf people, etc.	Primary	
SIGN LANGUAGE INTERPRETERS (both deaf and hearing) and their organisations.	Secondary	The SignON service is not a replacement of professional interpreters, but a tool to co-exists with them and aids the communication between deaf, hard of hearing and hearing people in conditions where interpreters are not available. It is important to note that we only work with data from people and from interpreters with their consent.
SCIENTIFIC COMMUNITY, SISTER EU PROJECTS, REGULATORS, POLICY MAKERS, CLIENTS AND INVESTORS: people with a scientific, political or economic link to this project, in a wide range of domains.	Secondary	The SignON project will provide new content and knowledge important for the advancement in SOTA; we will stress the importance of the United Nations’ Convention on the Rights of Persons with Disabilities and how this project fits in there.
INTERNAL		
CONSORTIUM PROJECT PARTNERS including the hearing researchers and the deaf representatives and organisations for the deaf people and sign languages.	Tertiary	The SignON project does not want to conclude or exclude anything about the application of the service. It is still a research project and is still open to dialogue in which all views and concerns can be expressed.

¹ In most of the cases this concerns people that have become deaf (e.g. old age, accidents, sickness, etc.) deaf people that did not have been exposed to nor used sign languages since birth, or deaf people with cochlear implants that did/do not have the need to use sign language and can deal with verbal language, etc.

4. Communication Strategies and Tools

The communication strategies were chosen, and are described in detail in D6.1 (SignON Communication and Dissemination Plan) to increase the visibility of the project (SO1), in order to inform the target audiences about the project's progress and results (SO2), as well as to create a positive attitude towards it (SO3).

The following communication strategies are some of the strategies that we have used with our primary target groups:

- **Reputation strategy** is the one applied to the "doubters" and "naysayers" about the intentions of the project. In our communication; using this we have strived to strengthen our reputation and to create the desired image among the target groups.
- **Positioning strategy** is the one in which we create the distinctive position of the SignON project in the minds and experiences of the target groups. In doing so, we are determining and strengthening the position of the project and its objectives and clarifying what place the SignON service can occupy with the primary target groups.
- **Word of mouth strategy** is a common communication strategy within the close deaf communities. The SignON project needs to acquire a distinctive identity within the primary target groups, which will make people talk positively about the project and share our posts on social media. In this way SignON's brand awareness is raised and its image is strengthened. This will entice the target groups to behave more positively about the project.
- Finally, **participation strategy** is an important communication strategy to be applied to the target group of deaf people. This strategy is all about entering into a dialogue with the target groups, which should lead to cooperation. Through co-design and co-development, solutions can be found to any issues in the project, by using the expertise and experiences of the primary target groups.

For other stakeholders such as representatives and organisations of deaf and sign languages (primary), sign language interpreters and their associations (secondary) and our tertiary target group of scientific community, regulators, policy makers, clients and investors, we have opted for a **network strategy** in which building long-term relationships is key. This is done by highlighting the project's own role in the network of relations and by paying attention to the interests of other stakeholders in the network.

For internal communication needs, we use a **family strategy** where stronger involvement is created between different project partners. The aim of this strategy is to find common focus and appreciation (SO4).

In our communication and dissemination plan, the following communication tools and quantitative objectives were chosen:

Channel	Target group	Measure	Project target
Project website	All	# site visits	6,000 during the project lifecycle
Social media	All	# followers	10,000 during the project lifecycle
Newsletter	All	#subscribers	200
Workshops by SignON	All	#attendees	3 workshops during the project lifecycle + 20-40 people per workshop
Internal workshops	Project partners	#attendees	Min. 3 workshops
Demonstrations	Deaf community and industry partners	#demonstrations	5 (over the lifecycle of the project)
Industry presentations and conferences	Industry partners and investors	#presentations	12 (4 per year)
Scientific publications	Scientific community	#submitted papers	Min. 31 submitted papers for the project lifecycle (15 for conferences, 10 for workshops and 6 for journals)
White papers	Policy makers	#papers	2
Media publications	All	#publications	10

5. Communication Objectives

In D6.1 (SignON Communication and Dissemination Plan), the SMART (Specific, Measurable, Achievable, Realistic and Timely) operational objectives were formulated. In the next section, for each strategic objective, the activities (operational objectives), implemented or not, are not only described, but they are also evaluated towards the second year of the project.

SO1 - Increase visibility of the SignON project

The project initially had to acquire and form an identity for the stakeholders. Different operational objectives were formulated in order to improve the visibility of the SignON project, so the objectives below mainly focus on the mindset of our target groups to generate interest about the SignON project.

First, a new logo was designed (**OO1.1 - Design of new SignON logo**) to replace the old logo. For the new logo, we had several focus points with which our target groups could identify. It should clearly show that it is also about sign languages, and the colour turquoise was chosen as this is the colour of the deaf communities worldwide. Together with Ridge Digital (a company led by a deaf website developer in the UK) several logos were designed and presented to the consortium. Eventually, a logo most similar to the Google Translate logo was chosen, in order that our target groups could immediately make the connection to machine translation, which is positive for the recognition of our project. In the name SignON, the letter 'O' was represented as an on/off button to show that it is possible for people to switch the application on and off whenever it is necessary. In this way, we want to emphasise that the SignON application is an option, which implies that the target groups themselves are free to choose whether or not to make use of this "tool" (instead of a human interpreter, for example).



Figure 1 - New logo of SignON

Together with the logo, a pdf document “SignON Brand Identity Style Guide” (**OO1.3 - Create a corporate style guide**) was developed. In this document rules were provided for the use of the SignON logo and its application for other media (such as T-shirts, pens, website, social media, etc.), the SignON colour palette, fonts and the compulsory use of the EU Emblem. Also, different templates (**OO1.4 - Create templates**) were created for powerpoint presentations, background images for sign language videos and word documents (for deliverables, etc.). The style guide document and templates were shared with the entire consortium in early April.

The original plan was to have updated the SignON website (www.signon-project.eu) by the end of May 2021 (**OO1.5 - Website update**) together with the logo and corporate identity manual. A company led by a deaf website developer, Ridge Digital, who has strong experience in creating websites about/for the deaf and sign language communities was employed based on a favourable quotation. Because the website had to be completely redone, both in terms of content and design, by the end of July 2021 (OO2.2 - Setting up accessible information and communication about the project), it was decided in a meeting with all WP leaders (26 May 2021) to integrate the quick update (OO1.5) into the entire update (OO2.2) and to set a new deadline for both operational objectives: the end of June. This ensured that everyone would have immediate access to all content (without having blank pages, as the writing of these pages was still in progress) and to be able to access it in International Sign.

Together with the new logo, several social media channels were launched at the end of April (**OO1.6 - start up of social media**). Our Instagram channel was only created later, mid-November 2021, as there was not enough visual content for the Instagram posts initially. So far we are using:

- facebook.com/SignONEU
- twitter.com/SignONEU
- linkedin.com/company/77344638/
- Instagram: [signon.eu](https://www.instagram.com/signon.eu)

The hashtag #SignON was introduced in the first posts on social media in April (**OO1.7 - introducing hashtag #signon**). It was also used by external stakeholders outside the consortium, which is a positive step towards achieving greater reach.

SO2: Disseminate information about and results of the SignON project

Key to this second strategic objective is to inform all target groups as much as possible about the project. We adopted a transparent communication method (reputation strategy) which also contributes to image improvement regarding the intentions of the SignON project. In other words, the objectives below are mainly focused on target group knowledge, and provides them with a better understanding of the project's objectives and what their role is, so we can stimulate their involvement so that they also become ambassadors for the project (positioning strategy).

On the website, we communicate about the project in general terms as much as possible so that the objectives and functioning of the SignON Project are immediately clear to visitors (**OO2.3 - Making the structure and functioning of the project transparent**). In addition to the homepage with the basic information, we have added the following pages:

- About SignON (<https://signon-project.eu/about-signon/the-signon-project/>) with information about the project and the project objectives.
- Project Objectives (<https://signon-project.eu/about-signon/project-objectives/>) in which our objectives are further explained in short and simple terms.
- Inside the Project (<https://signon-project.eu/about-signon/inside-the-project/>) in which various concrete objectives and work packages are presented.
- Workplan (<https://signon-project.eu/about-signon/workplan/>) with an overview of deliverables and deadlines.
- Partners (<https://signon-project.eu/consortium/partners/>) with an overview of the different consortium members.
- Who are we? (<https://signon-project.eu/consortium/who-are-we/>) with a list of all SignON project staff.
- Events (<https://signon-project.eu/events/>) with an overview of all events organised by or related to the SignON project.

- Co-creation (<https://signon-project.eu/co-creation/>) with an explanation of our ambitious collaboration with our target groups.
- Surveys (<https://signon-project.eu/co-creation/surveys/>) where questionnaires will be located.
- I want to join (<https://signon-project.eu/co-creation/i-want-to-join/>) where those interested can register for co-creation events.
- News (<https://signon-project.eu/news/>) where our press releases "project kick-off" in International Sign, Irish, English, Dutch, Spanish, VGT, LSE, BSL, ISL and NGT can be seen. SignON logos can also be downloaded here.
- Latest news (<https://signon-project.eu/latest-news/>) with an overview of the latest news related to SignON.
- Press releases (<https://signon-project.eu/news/press-releases/>) with an overview of articles mentioning SignON.
- Newsletter (<https://signon-project.eu/news/newsletter/>) where one can subscribe to the newsletters, and also find the newsletter archives.
- Scientific Publications (<https://signon-project.eu/publications/scientific-publications/>) with an overview of our scientific publications.
- Public Deliverables (<https://signon-project.eu/publications/public-deliverables/>) with an overview of our public deliverables.
- Other publications (<https://signon-project.eu/publications/other-publications/>) with an overview of our other publications such as our video series "SignON Encyclopedia" and video interviews.
- Contact (<https://signon-project.eu/contact/>) where one can contact us by written form or by video message (the camera of the device with which you open the page turns on automatically and deaf signers can record themselves in their preferred sign language).

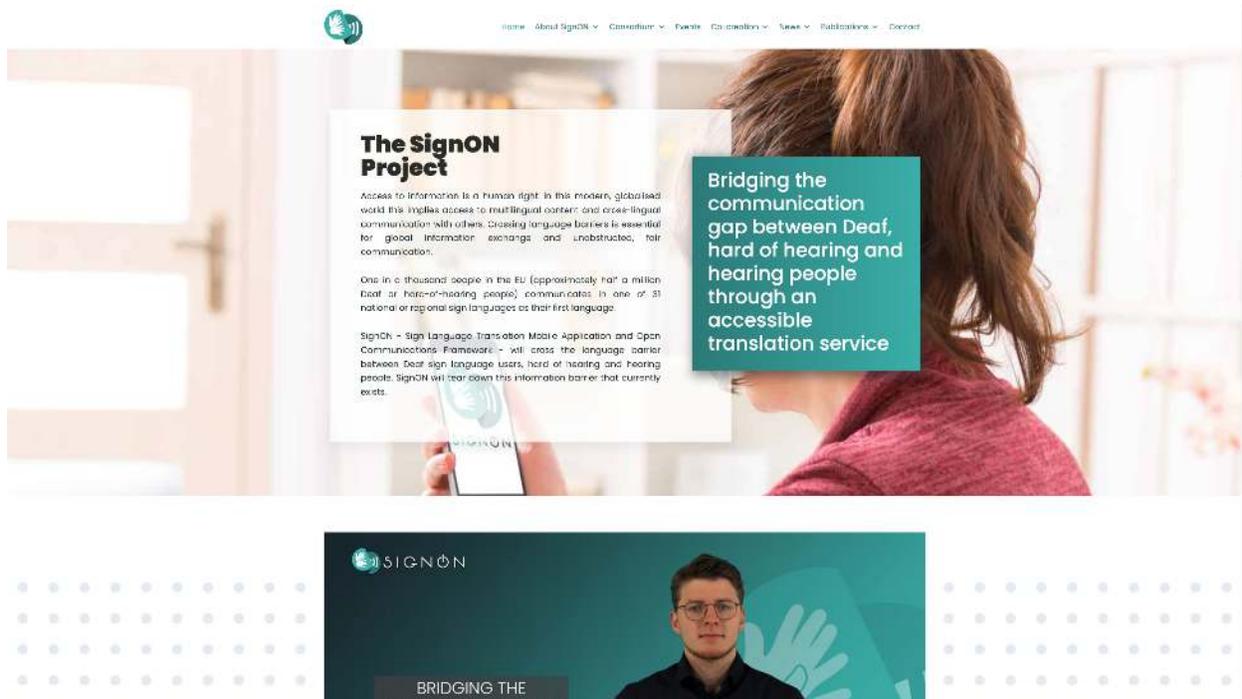


Figure 2 - Homepage of SignON website

Sign language videos with translations of the texts in International Sign (**002.2 setting up accessible information and communication about the project**) were added to all website pages. At the launch of the website, two announcement videos were distributed on SignON social media channels, one with International Sign, and one without (**002.1 Announcement of the SignON project**). Press releases were also issued in ISL, BSL, VGT, NGT, IS, LSE, Irish, English, Dutch and Spanish. So far, our project has received a major media mention (**002.7 Dissemination by (mainstream) media publications**) by The Economist (March 4th 2021). Later, in December 2021, a FAQ page (**002.4 - Create FAQ**) was added to the website (<https://signon-project.eu/about-signon/faqs/>). Currently it contains five questions with answers:

- Will sign language avatars ever replace sign language interpreters?
- Why does the SignON project only work with the languages English, Irish, Dutch, Spanish, BSL, ISL, NGT, VGT and LSE?
- Why isn't sign language universal?
- Why do not all deaf or hard of hearing people use sign language?
- Does the SignON project focus only on translation between spoken languages and signed languages?

After the launch of the website and summer break we started updating the website monthly (with news posts and videos) and updating weekly on our social media channels (**OO2.5 Communicating news and (intermediate) results about the project**). A new video series, ‘SignON Encyclopedia’ (<https://signon-project.eu/publications/other-publications/>) has also been launched, covering various topics related to the deaf communities, sign language and the SignON project, such as machine translation systems between spoken languages and sign languages and sign language avatars. These videos not only aim to raise awareness about the deaf communities and sign languages, but also explain the SignON project and its objectives. So far seven videos have been posted on the following topics:

- What are name signs?
- Is sign language universal?
- What is a sign language interpreter?
- Who invented sign language?
- Do sign languages derive from spoken language?
- Is there a one-to-one relationship between spoken and sign language?
- Are there building blocks in sign language?

Our scientific publications were also published on our website, but so far they have not been translated to International Sign (**OO2.6 Dissemination of research data and specific publications**). As we are still in the first year of the project, there are not that many results to share yet except for the results of the first surveys that were done with members of the deaf communities by EUD. This was presented in a video interview with Mark Wheatley, the director of EUD (scheduled to publish in the second half of December). In October we sent a welcome newsletter to everyone who had subscribed. The plan is to follow this up with newsletters in each quarter, with the first planned for December 2021.

In 2021, we organised demonstrations and workshops, and were present at various events as representatives for the SignON project (**OO2.8. Organising demonstrations, conferences and workshops**). An overview is given below:

Event	Date	Location	Description
CLIN31	July 9, 2021	Online	The 31st Meeting of Computational Linguistics in the Netherlands. A team from SignON presented a poster titled “The SignON project: a Sign Language

			Translation Framework”. SignON hosted a booth there with the support of TaalUnie.
AT4SSL Workshop	August 20, 2021	Online	First International Workshop on Automatic Translation for Signed and Spoken Languages (conducted within the MTSummit2021). ² One long paper ³ and one short paper ⁴ related to the SignON project were presented at the workshop.
TaalStudio’s forum “Language and Technology: A Successful combination”	November 12, 2021	Utrecht	The workshop is part of the Translation Europe-project of the European Commission, and was about different topics such as automatic translation/interpretation and various applications of language technology. In his session, our scientific project leader Dimitar Shterionov (TiU) talked about the SignON project, differences and similarities between sign and spoken languages, and technical challenges related to machine translation. After his lecture there was a brainstorming session with students about what would be a good way to represent sign language in a written-like form.
META-Forum 2021	November 15, 2021		SignON had a booth at the project expo on the first day of META-FORUM, the international conference series on powerful and innovative Language Technologies for the multilingual information society.
LEAD ME Winter Training School Madrid 2021	November 15, 2021		UPF-GTI ran the 2-hour workshop <i>Virtual Signers generation within SignON</i> at the winter school <i>Media Accessibility Training: Sign Language and Subtitling for the Deaf and Hard-of-hearing</i> organised by the COST action LEAD ME (Leading Platform for European Citizens, Industries, Academia and Policymakers in Media Accessibility), attended by around 25 persons.
VGTC’s workshop “Language police or not?”	November 20, 2021	Ghent	A workshop in Flanders (Belgium) organised by VGTC where a short presentation of the SignON Project was given to about hundred Flemish signers, followed by a Q&A session.

² <https://sites.google.com/tilburguniversity.edu/at4svl2021/home>

³ “Frozen Pretrained Transformers for Neural Sign Language Translation” by Mathieu De Coster, Karel D’Oosterlinck, Marija Pizurica, Paloma Rabaey, Severine Verlinden, Mieke Van Herreweghe and Joni Dambre

⁴ “Defining meaningful units. Challenges in sign segmentation and segment-meaning mapping” by Mirella De Sisto, Dimitar Shterionov, Irene Murtagh, Myriam Vermeerbergen and Lorraine Leeson

SO3 – Raising positive attitudes about and fostering engagement with SignON

This strategic objective focuses on familiarising the target groups with the SignON project and its objectives to stimulate and accelerate their acceptance of automatic translation between signed and spoken languages (and especially when it comes to the use of sign language avatars). For this reason different operational objectives were outlined in our communication and dissemination plan to create more positive and constructive behaviour towards the project.

However, many of those operational objectives could not be effectively implemented because of the COVID-19 regulations that impede the social gathering of DHH people. As a result, it is not as easy to enter into dialogue with potential users, representatives and organisations (**OO3.1 and OO3.2**). On November 20th, VGTC organised a presentation and workshop on "Language police or not?", attended by about a hundred Flemish signers (<https://signon-project.eu/reactions-from-flemish-signers/>) . Our communications coordinator took the opportunity to give a short presentation on SignON. This raised interest among the audience and there were several positive reactions, but some were concerned about the SignON project and its objectives. Afterwards, a Q&A session was hosted, which was then recorded and distributed on the SignON social media channels with the intention of generating more followers.

Contact has been made with several different external researchers outside of the SignON consortium (**OO3.3**), and an interview has been scheduled with Dr. Maartje De Meulder, a deaf academic who wrote an article about projects such as SignON: *"Is 'good enough' good enough? Ethical and responsible development of sign language technologies"*⁵. The video will be posted on the website and social media in January 2021. This will hopefully lead to more reactions and involvement of DHH people on social media, so that we can start a dialogue with them (**OO3.5**) and get a better understanding of their information and communication needs. This will then enable us to sharpen our communication goals (**OO3.4**).

⁵ De Meulder, Maartje. "Is "good enough" good enough? Ethical and responsible development of sign language technologies." Proceedings of the 1st International Workshop on Automatic Translation for Signed and Spoken Languages (AT4SSL). 2021.

SO4 - Aligning visions between project partners internally

The family strategy prevails in this strategic objective. It is necessary to raise awareness about the deaf and sign language communities among other project partners internally, to have the best possible informed understanding of what the sensitivities are around the SignON service and sign language avatars, and what impact they may have on the deaf and sign language communities (**OO4.1. Raising awareness about the deaf and sign language communities among project partners**). That is why two internal seminars have been organised:

- November 4, 4pm-5pm: “#notoavatars: why is there a resistance from the deaf communities?” by Jorn Rijckaert, communication and dissemination coordinator (VGTC);
- December 16, 11am-12pm: “The hare and the tortoise? Keeping up with Deaf Studies” by Dr. Maartje De Meulder, a deaf academic of University Utrecht.

To ensure the transparency of our internal operations towards our target audiences, a short video report of both internal seminars was posted on our website (<https://signon-project.eu/first-internal-signon-seminar/> and the second internal seminar will be posted in the second half of December) and social media channels.

It is also important to harmonise our visions internally, in order to achieve uniformity about the project and its intentions (**OO4.3 - Aligning visions among different project partners**). Internally, there have been meetings and e-mail communication around two issues such as:

- Which sign language data should we use to train machine learning behind the SignON application, only those of L1 signers, or also of L2 signers?
- Will the SignON service also be used to make television programmes accessible?

At the moment, no clear vision has emerged from this and discussions are still ongoing or planned, but here VGTC has an important and/or leading role.

6. Evaluation

In this section, the strategic objectives are evaluated with the aim of (re)organising our communication and dissemination activities for the next two years of the project. In doing so, we check which operational objectives have or have not been (fully) implemented. Should the operational objectives be redefined, or should additional objectives be formulated? In view of our chosen communication strategies for the target groups of the SignON project, the four strategic objectives remain unchanged and will be passed on to the next project application. No additional strategic objectives will be formulated (for the time being).

SO1 - Increase visibility of the SignON project

The first strategic objective (SO1) has the goal of increasing visibility of the SignON project. The list below indicates the operational objectives originally outlined in our SignON Communication and Dissemination Plan (Deliverable 6.1), and whether they have been implemented or not:

No.	Description	Status
OO1.1	Design of new SignON logo	Done
OO1.2	Sign name for SignON	Not achieved
OO1.3	Create a corporate style guide	Done
OO1.4	Create templates	Done
OO1.5	Website update	Done
OO1.6	Start-up of social media	Done
OO1.7	Introducing hashtag #signon	Done

A sign name is often indispensable in sign language communities when a name is often mentioned. Rather than using fingerspelling, a name sign is very useful to represent a name in spoken/written form. In order to strengthen our word of mouth strategy, we hoped that the name sign for SignON would be created naturally by the deaf community (**OO1.2 - Sign name for SignON**). Despite our calls on social media, no name signs (or suggestions) have yet appeared. This is either due to several reasons or their

confluence: the SignON project is still a far cry for many deaf signers, or they do not talk about it often enough to give it a name sign. The COVID-19 regulations (for which many activities where deaf people gather have been cancelled) certainly play a role in this. On the other hand, it is not always effective to give a name sign to a project or a company. This usually happens on the basis of a visual characteristic in the logo. In this case, it is very difficult for SignON. Internally, among the deaf staff in the SignON consortium, a simple name sign is still used, namely SIGN (one sign for "signs") followed by finger spelling of O-N. It was originally intended that SignON should already have a name sign in month 4 of the project, so that SignON translators could already apply it in their translation to International Sign and national sign languages for the website. Unfortunately, this goal was not feasible in terms of timing and we are still waiting for the Deaf communities to get together more often and start talking about the SignON project.

At the time of writing on 30th November 2021 we noted the progress status of number of visitors and followers on SignON website and social media channels:

Channel	Measure	Project target	First year
Project website	# site visits	6,000 during the project lifecycle	1326 users
Facebook	# followers	10,000 during the project lifecycle	186 followers
Twitter			180 followers
LinkedIn			57 followers
Instagram			72 followers

Even though the targets to be achieved are very ambitious, we still record a relatively low number of followers on social media, despite our weekly posts. The restrictive COVID-19 measures have certainly affected our word of mouth strategy. During summer break, our communications manager had some informal conversations within his networks in the Flemish Deaf community to find out what the reasons might be that deaf people do not (want to) follow the SignON project. Deaf signers do not immediately find their way to SignON’s social media channels. First impressions: (1) the announcement video was published at the start of the summer holidays, which is where people interact less over social media. (2) They still experience SignON a little too much as a far cry (too much academic, technical or hearing) and do not realise it may have an impact on their daily lives. (3) They still do not understand what the project entails. As a result, new priorities were set in the communication and dissemination plan (more awareness-raising videos, among others) and a new vacancy was posted in September 2021 for a

communication officer for WP6 (appointed by VGTC). From October onwards, an additional staff member was hired to boost our SignON project communications, especially on the social media channels.

For the next year of the project, we need to make use of different platforms on social media with lots of DHH followers (e.g. sharing our posts on the pages of national deaf federations, deaf clubs, etc.). In addition, due to the fact that communication is often in International Sign, we should consider for the next project year if we could invest more in the five different national sign languages involved in the project. Budgetary considerations certainly play a role in this. We should also note that, even though it is a positive point for us that deaf sign language staff are involved in the project, the audience of non-sign language DHH people might feel left out of our communication. We also need to look for the platforms of these groups that are difficult to reach from the deaf communities. In order to achieve the above mentioned quota of followers, we are setting a new operational objective (**OO1.8 - Increasing reach of social media channels**) in which we try to reach different target groups to increase the visibility of the SignON project (positioning strategy).

SO2: Disseminate information about and the results of the SignON project

The operational objectives of this second strategic objective mainly focus on disseminating information about and (intermediate) results from the SignON project. Although some of the operational objectives (OO2.5, OO2.6, OO2.7 and OO2.8) are marked with a lifetime throughout the project lifecycle, they will be evaluated below.

No.	Description	Status
OO2.1	Announcement of the SignON project	Ongoing
OO2.2	Setting up accessible information and communication about the project	Done
OO2.3	Making the structure and functioning of the project transparent	Done
OO2.4	Create FAQ	Ongoing
OO2.5	Communicating news and (intermediate) results about the project	Ongoing

OO2.6	Dissemination of research data and specific publications	Ongoing
OO2.7	Dissemination by (mainstream) media publications	Ongoing
OO2.8	Organising demonstrations, conferences and workshops	Ongoing

Regarding the first operational objective (**OO2.1 - Announcement of the SignON project**) we have made announcement videos in International Sign. In the coming year we will focus on expanding our announcement video to other languages to achieve a greater reach of target groups (who are not proficient in English or International Sign). We should also consider if it might be more efficient to make other kinds of announcement videos in order to specifically address the other target groups including the (non-signing) DHH groups, as well as the target group of the hearing (including family, colleagues, etc.). We will need to consider how to arrange interviews with the most important actors for the project objectives under COVID-19 conditions.

Currently, the FAQ page on the SignON website contains only five questions. Originally this was seen as an objective that could be fully achieved in our Communication and Dissemination Plan (Deliverable 6.1), but this objective is active until the end of the project. More questions and answers will be added in the coming year as more contacts with the target groups are made and new questions arise (OO2.3 Create FAQ will be rephrased to **OO2.3 Update FAQ**).

Before the summer break in 2021, a lot of time was invested in creating and updating the SignON website. Now the two operational objectives OO2.2 and OO2.3 can be considered as complete, and after the summer break there was a full focus on implementing the next operational objectives (from OO2.5 to OO2.8). The overview below shows the quota to be achieved and how much we have achieved so far (at the time of writing on 30th November 2021):

Channel	Measure	Project target	First year
Newsletter	#subscribers	200	33
Workshops by SignON	#attendees	3 workshops during the project lifecycle + 20-40 people per workshop	1
Demonstrations	#demonstrations	5 (over the lifecycle of the project)	0

Industry presentations and conferences	#presentations	12 (4 per year)	5
Scientific publications	#submitted papers	Min. 31 submitted papers for the project lifecycle (15 for conferences, 10 for workshops and 6 for journals)	8
White papers	#papers	2	0
Media publications	#publications	10	1

For the fifth operational objective (**OO2.5 - Communicating news and (intermediate) results about the project**) a communication officer has been appointed for each WP. Their role is to pass on news, progress or results of the activities in their WP to our communication team for the posts on our website, quarterly newsletter and social media channels. Again, we need to check if, in addition to International Sign, these should also be communicated in the five national sign languages (BSL, ISL, VGT, NGT and LSE), depending on the (budgetary) possibilities.

So far, eight scientific publications (published in academic and non-academic venues) have been generated by SignON:

- Mathieu De Coster, Mieke Van Herreweghe and Joni Dambre, Isolated Sign Recognition from RGB Video using Pose Flow and Self-Attention, Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2021
- Dimitar Shterionov, Vincent Vandeghinste, Horacio Saggion, Josep Blat, Mathieu De Coster, Joni Dambre, Henk van den Heuvel, Irene Murtagh, Lorraine Leeson, and Ineke Schuurman, The SignON project: a Sign Language Translation Framework, 31st Meeting of Computational Linguistics in the Netherlands (CLIN31). 2021
- H. Saggion, D. Shterionov, G. Labaka, T. Van de Cruys, V. Vandeghinste and J. Blat, SignON: Bridging the gap between Sign and Spoken Languages, XXXVII Spanish Society for Natural Language Processing conference (SEPLN2021). 2021
- Dimitar Shterionov, John O’Flaherty, Marcello Paolo Scipioni, Matteo Villa, Edward Keane and, Marco Giovanelli, Early-stage development of the SignON app and open framework - challenges and opportunities, Proceedings of the 18th Machine Translation Summit (MTSummit2021). 2021
- Mirella De Sisto, Dimitar Shterionov, Irene Murtagh, Myriam Vermeerbergen and Lorraine Leeson, Defining meaningful units. Challenges in sign segmentation and segment-meaning

mapping, Proceedings of the 1st International Workshop on Automatic Translation for Signed and Spoken Languages (AT4SSL). 2021.

- Mathieu De Coster, Karel D’Oosterlinck, Marija Pizurica, Paloma Rabaey, Severine Verlinden, Mieke Van Herreweghe and Joni Dambre, Frozen Pretrained Transformers for Neural Sign Language Translation, Proceedings of the 1st International Workshop on Automatic Translation for Signed and Spoken Languages (AT4SSL). 2021.
- Santiago Egea Gómez, Euan McGill and Horacio Saggion. Syntax-aware Transformers for Neural Machine Translation: The Case of Text to Sign Gloss Translation, Proceedings of the 14th Workshop on Building And Using Comparable Corpora. (RANLP 2021), 2021.
- Frank Fowley and Anthony Ventresque, Sign Language Fingerspelling Recognition using Synthetic Data, 29th Irish Conference on Artificial Intelligence and Cognitive Science (AICS). 2021

Only the abstracts were published on the website in English, with a link to the full article as a PDF (**002.6 - Dissemination of research data and specific publications**). Over the next two years we need to work on making these abstracts accessible in International Sign, with the intention of publishing it on acadeafic.org, academic vlogs and blogs about sign language and Deaf Studies research.

Although we only had one press item in the first year of the project, it is too early to evaluate the seventh objective (**002.7 - Dissemination by (mainstream) media publications**). It is likely that the SignON project will receive the necessary media and press attention when the intended results are visible in the next two years.

Lastly (**002.8 - Organising demonstrations, conferences and workshops**), we are looking forward to organising a SignON workshop 2022 in Belgium (Antwerp). We should also focus on organising lectures and demonstrations (physical or online by webinar) to bring our consortium members closer to our target groups. This could not only boost our new objective OO1.8, as well as OO3.1 and OO3.2 (see below), but also the co-creation events of the SignON project.

SO3 - Raising positive attitude about and fostering engagement with SignON

In order to implement our participation and network strategy, the following operational objectives were formulated. Although four of these objectives are active for the entire project lifecycle, they are nevertheless evaluated on the basis of the past year, with the aim of these objectives more efficiently in the next two years. Only the last two objectives (**OO3.6 - PR videos about the transparent operation and cooperation** and **OO3.7 - Create demonstration videos on the use of SignON service**) are planned for the next two years.

No.	Description	Status
OO3.1	Actively entering into dialogue with potential users	Ongoing
OO3.2	Actively entering into dialogue with representatives and organisations	Ongoing
OO3.3	Actively entering into dialogue with research and innovation groups	Ongoing
OO3.4	Preparing communication scenarios	Delayed
OO3.5	Managing reactions on social media	Ongoing
OO3.6	PR videos about the transparent operation and cooperation	Planned
OO3.7	Create demonstration videos on the use of SignON service	Planned

As mentioned earlier, the COVID-19 measures have hindered the efficient implementation of the first operational objectives. We had only one opportunity to enter into dialogue with potential users, which was at the VGTC workshop (see above). The impact of this was an increase in the number of followers on our social media. After this workshop, the number of Flemish people (especially deaf signers) interested in the SignON project increased. This is something we need to follow up on more often in the coming year (**OO3.1 - Actively entering into dialogue with potential users**). If COVID-19 conditions allow or do not make it difficult, it would be hugely beneficial to the project to physically meet the deaf people in Flanders, the Netherlands, the UK, Ireland and Spain at their meetings or events (such as World Day of the Deaf). Of course, for this we have to count on extra cooperation from the various representatives and organisations (**OO3.2 - Actively entering into dialogue with representatives and organisations**).

Through participation in various events (see above), we have been in dialogue with different researchers. However, following the 'nothing about us without us' principle, an additional point of attention is that we need to address and involve more Deaf researchers from the Deaf Studies domain and Deaf experts in the SignON project (**OO3.3 - Actively entering into dialogue with research and innovation groups**).

Despite weekly efforts to produce and disseminate news and videos (also in International Sign) on our social media channels, there has been little or no response to our posts. As mentioned before, our communication manager found that there is still too little interest or disbelief from the deaf communities in the SignON project ("a far cry from our daily lives"), or a certain resistance can be observed. Only with our post about the sign language avatar for the 2022 Winter Olympics in China (<https://signon-project.eu/sign-language-avatar-in-the-2022-winter-olympics/> on 25 November 2021), in which we show the sign language avatar as an illustration and poll opinions about it, there was a reaction. Possibly, if more applications of automatic translation between spoken and sign languages and sign language avatars are visible, we may expect more reactions to our external SignON communication activities, which we will then have to follow up (OO3.5 - Managing reactions on social media). This will provide us with more input to prepare and finalise our communication scenarios (OO3.4 - Preparing communication scenarios), which is not possible or feasible so far (after all, there was only one resistance on social media, the hashtag #notoavatars).

SO4 - Aligning visions between project partners internally

To achieve this fourth strategic objective, three operational objectives were formulated that will remain unchanged until the end of the project. They were originally given a deadline in our Communication and Dissemination Plan (Deliverable 6.1), but due to their necessity they were given a longer life cycle until the end of the SignON project.

No.	Description	Status
OO4.1	Raising awareness about the deaf and sign language communities among project partners	Ongoing
OO4.2	Communication training for project partners and disseminating correct terminology about being deaf and sign language	Ongoing
OO4.3	Aligning visions among different project partners	Ongoing

The first objective (**OO4.1 - Raising awareness about the deaf and sign language communities among project partners**) aimed to organise internal workshops, in which other consortium members would be sensitised regarding key concerns within the deaf and sign language communities, especially with regard to sign language avatars. The figure below shows the quote of internal workshops to be achieved:

Channel	Measure	Project target	First year
Internal workshops	#attendees	Min. 3 workshops	2

The minimum of three workshops is relatively low, considering the necessity and the fact that there is a lot of interest within the consortium for such workshops. This has also been demonstrated by various online video meetings and mail correspondence between consortium members regarding various (ethical) issues concerning the deaf communities and sign languages. These discussions will certainly be continued in the coming years with the aim of achieving a uniform vision on these issues, such as the choice of training materials for the machine learning behind the SignON application and the application of these services in, for example, television broadcasts (**OO4.3 - Aligning visions among different project partners**).

Although the SignON communication coordinator pays frequent attention to the correctness of the terminology about being deaf (e.g. avoiding the use of the word "hearing impairment") and sign language and the word choices (e.g. avoid paternalistic phrases such as "we want to help deaf people improve their quality of life") in various public deliverables, there is still some lack of input to produce a document with correct terminology and communication and writing tips. This will be followed up in the coming year (**OO4.2 - Communication training for project partners and disseminating correct terminology about being deaf and sign language**).

7. Communication Organisation

The above communication objectives that remain to be implemented are shown below in a schedule (the rows represent operational objectives and the columns represent the month of the project lifecycle). Only those communication objectives that must be followed up over the entire project lifecycle are coloured grey. Other communication objectives with a short lifespan are shown in blue and concern a period (first blue is the start of the communication objective and last blue is the completion).

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